

## 5.0 SPENT NUCLEAR FUEL

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
I	<b>Projects Analyzed in the 1995 EIS</b>			
1	<b>C-2.1 Test Area North Pool Fuel Transfer (Ongoing Project):</b> Planning for this project was addressed as an ongoing project, and project-specific NEPA analysis, although summarized in the 1995 EIS, was performed separately. Planning for this ongoing project supports two subprojects and requires transfer of: 1) TMI-2 core debris from the TAN-607 basin to newly constructed retrievable interim dry storage located at TAN or INTEC; and 2) LOFT and DOE-owned Commercial SNF from the TAN-607 basin to established dry storage at TAN. TMI debris was to be dewatered, dried with a heated system and stored at either location. LOFT and Commercial SNF would be washed, drip-dried and stored at TAN-791. If a new facility were built at INTEC, construction was	Since release of the original ROD, planning has been impacted by the release of nine other documents: 1) the Idaho Settlement Agreement (10/95); 2) Amended ROD (02/96); 3) EA-1050 (05/96); 4) EA-1217 (08/97); 5) ISFSI Final EIS NUREG 1626 (03/98); 6) NRC License (03/99); 7) the LCPP for PBS ID-SNF-103 (11/99); 8) the FY01 DWP (09/00); and 9) Letter of Instruction, DOE-ID to BBWI (07/00). The newly constructed, NRC-licensed Independent Spent Fuel Storage Installation (ISFSI) located at INTEC began operations 03/99 for receipt of TMI debris. The facility including the pad and security fence occupies less than 0.6 acres on a two-acre exclusion zone. The 29th and final TMI shipment was completed 04/20/01. Milestone completion was confirmed in a letter to the State (INTEC-SNF-01-027,	The dry storage of TMI debris has been determined to be in a newly constructed NRC-licensed ISFSI. This is within original planning except that NRC-licensing of an ISFSI was not considered under the original ROD. Operation of the new facility and transfer of the TMI debris from TAN-607 commenced in 03/99, just over one year later than considered under the original ROD. However, the period of transfers was reduced by one year. The size of the facility was reduced by 0.2 acres, and the number of transfers was reduced by 20. All epoxied materials have been transferred to the LOFT and commercial SNF subproject. While separate management and the potential for treatment of epoxied SNF and TMI debris was not considered under this project, item I.9 of this summary (project C-4.1.8)	The site has a smaller footprint and received fewer shipments of TMI debris than planned.

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	planned during the period of 1995-1996. The 1995 EIS provided a Project Data Sheet that analyzed new construction only at INTEC. Operations were scheduled to start in 1997 with transfers through 2000. The new TMI pad was analyzed to occupy 0.8 acres and receive 49 transfers.	04/20/01). Under the approved scope of the FY01 DWP, planning has begun for storage of LOFT and Commercial SNF at the established dry storage pad, TAN-791. Under the terms of the LCPP, epoxied SNF and epoxied TMI debris will be packaged and stored separately at TAN-607 until it undergoes final disposition prior to shipment to the geologic repository.	was designed to show treatment capability for all SNF types including epoxied fuels.	
2	<b>C-4.1.1 Expended Core Facility Dry Cell Project:</b> This project requires construction of the Expended Core Facility Dry Cell Project for the management of naval SNF at the NRF. The purpose of this project is to provide a more efficient facility for: 1) fuel examination activities, and 2) preparation of naval SNF for shipment to INTEC for interim storage. The construction was planned to take place during the period 05/96 - 05/98 with operational startup 08/98. A total of 728 shipments to INTEC were analyzed.	This project is to be implemented as a result of the ROD. Since release of the original ROD, planning has been impacted by the release of three other documents: 1) The Navy Container System EIS EIS-0251 (11/96); 2) ROD-1 62FR1095 (01/08/97); and 3) ROD-2 62FR23770 (05/01/97). The Navy completed construction of the original ECF expansion described in the FEIS. However, as described in the Naval SNF Container System FEIS and associated RODs, the modification of the ECF was revised to incorporate the changes needed to	The additional facilities needed to fully implement the decisions reached as a result of the Naval SNF Container System FEIS are under construction. Operational use of these facilities has been rescheduled to support efficient construction and testing of the integrated system. With the suspension of SNF transfers to INTEC for storage after FY02, the Navy expects an estimated 515 transfers, a reduction of from 60 to 213 total transfers for the period under consideration (NR:IBO-01/062; 04/05/01).	Slightly negative impacts to land use and positive impacts to transportation

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
		implement dry storage and eventual shipment of naval SNF to the geological repository.		
3	<b>C-4.1.2 Increased Rack Capacity for CPP-666:</b> Planning for this project requires replacing storage racks and reracking SNF in pools 1, 5 and 6 at CPP-666 for the purpose of increasing storage capacity. This project was scheduled for the period 1994-1999.	This project is to be implemented as a result of the ROD. However, since release of the original ROD, planning has been impacted by the release of two other documents: 1) the Idaho Settlement Agreement (10/95); and 2) the Amended ROD (02/96). With reduced storage needs, reracking was required and achieved only for Pool 1. Additional reracking could proceed if necessary.	Since release of the ROD, only Pool 1 was reracked. Pools 5 and 6 were not reracked.	Small positive impacts
4	<b>C-4.1.3 Additional Increased Rack Capacity (CPP-666):</b> Planning for this project requires replacing storage racks and reracking SNF in pools 2, 3 and 4 at CPP-666 for the purpose of increasing storage capacity. This project was scheduled for the period 1995-1997.	The decision on this project was deferred for a future determination, i.e., this project was not selected in the ROD, and there is no plan to move forward on this project.	Since release of the ROD, there have been no operational differences.	Small positive impacts
5	<b>C-4.1.4 Dry Fuel Storage Facility, Fuel Receiving, Canning/Characterization, and Shipping:</b> Planning for this project requires	<b>This project is to be implemented as a result of the ROD.</b> The ROD anticipated operation in 2004. Since release of the ROD, the	Management of the subject SNF (to be repackaged and stored) will be in a newly constructed NRC-licensed ISFSI. This is within original	Small positive impacts

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	construction of a one or two facility project for managing the majority of DOE-owned SNF: a) Fuel Receiving, Canning/Characterization, and Shipping Facility; b) Dry Fuel Storage Facility. The project would provide capability to receive, characterize, treat (if necessary), repackage and dry store SNF until shipment to the geological repository could begin. Construction was planned during the period 1999-2008, with operational start-up in 2008. The facility would occupy or disturb approximately 15 acres.	project has been redefined from a traditional LICP to be built and operated by the M&O to a privatized procurement to be built, NRC-licensed, and operated by a separate contractor. The NRC will perform additional NEPA analysis for the facility. The contract was awarded on 05/19/00. The project will be a single facility under construction from 07/03-06/05 and operational in 06/30/05. The facility will occupy or disturb no more than 7.8 acres. The current contract calls for reduced SNF handling and storage expectations. In addition, the Amended ROD reduces the expected fuel receipts by 807 shipments, thereby reducing the necessary storage capacity. However, long-term planning requires facility expansion and restores management of most SNF allowed under the Amended ROD.	planning except that neither NRC-licensing of an ISFSI, nor privatized construction and operation was considered under the original ROD. Operation of this new facility is expected to begin three years earlier than planned, but with a much shorter construction time reduced from nine to three years. The size of the facility or the disturbance will be reduced by 7.2 acres. The amount of SNF stored at this location is likely to be reduced. A labor agreement (no-layoff due to impacts from the privatized project) was negotiated with the local SNF operators union (Labor Agreement). This will have no NEPA impacts.	
6	<b>C-4.1.5 Fort St. Vrain Spent Nuclear Fuel Receipt and Storage:</b> Planning for this project requires transfer of Fort	<b>This project is to be implemented as a result of the ROD.</b> However, since release of the original ROD,	The 244 shipments to the INEEL of FSV SNF are delayed until the period 2024-2027, when they will be	Slightly positive impacts

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	St Vrain SNF from storage in Colorado to the INEEL for long term interim storage. The project was planned for the transfer of 244 shipments of SNF to CPP-603/IFSF during the period 1996-1997.	planning has been impacted by the release of four other documents: 1) the Idaho Settlement Agreement (10/95); 2) the Amended ROD (02/96); 3) the NRC license; and 4) the NRC EA and FONSI for license transferral. As a result of the Amended ROD, FSV transfers to the INEEL (for the purpose of long-term interim storage) were entirely eliminated. Transfers to the INEEL, for the purpose of repackaging for shipment to the repository, will begin only when "a permanent repository or interim storage facility for spent fuel located outside of Idaho has opened and is accepting spent fuel from the INEL."	received and repackaged at INTEC for immediate shipment to the geologic repository. The SNF currently resides in a NRC-licensed ISFSI managed by DOE at FSV Co. NEPA analysis for continued SNF storage in Co. has been performed by the NRC.	
7	<b>C-4.1.6 Spent Fuel Processing:</b> This project was designed to restore INEEL's capability to process SNF in two phases. Phase 1 would have restarted the Fluorinel Dissolution Process (FDP) facility in CPP-666, and the Fuel Processing Building (CPP-601) to run from 1997-2000. The FDP would process zirconium fuels and CPP-601 would extract uranium and	This project was not selected in the ROD. It was not included within the preferred alternative, and there is no plan to move forward on this project.	Since release of the ROD, there have been no operational differences.	This project was not selected for implementation in the ROD.

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	<p>make product. Phase 2 would then have shut down the FDP and CPP-601 to provide upgraded and new facility capabilities at the FDP and elsewhere at two to three times the previous throughput. The upgrades would include:</p> <p>1) addition of an electrolytic dissolution process to permit processing of aluminum and stainless steel fuels; 2) completion of the suspended Fuel Processing Restoration (FPR) project (CPP-691) for increased uranium extraction capability; and 3) new capability for graphite fuel processing. Construction was planned during the period of 1999-2006.</p>			
8	<p><b>C-4.1.7 Experimental Breeder Reactor-II Blanket Treatment:</b> This project would modify the Fuel Cycle Facility (FCF) at the ANL-W site to treat Experimental Breeder Reactor-II (EBR-II) Blanket SNF assemblies for safe storage. Treatment, known as electrometal-lurgical treatment (EMT) and developed for the recycling of</p>	<p><b>The decision on this project was deferred</b> for a future determination, i.e., this project was not selected in the ROD. However, since release of the original ROD, planning has been impacted by the release of four other documents: 1) EA-1148 (05/96) and its FONSI; 2) the final EIS for management of sodium-bonded SNF (EIS-0306F, 07/00); 3) its ROD 65</p>	<p>Since release of the ROD, the scope of treatment is approximately the same (25 to 26 MTHM), but the time of treatment (2 to 13 years) has increased. With the release of the new project ROD (Item 3), there has been one operational difference from the analysis provided in Item 2. The project ROD and the Implementation Plan (Items</p>	<p>Impacts are no different than previously analyzed</p>

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	EBR-II sodium-bonded (Na-Bonded) driver assemblies, would separate depleted uranium (DU) from radio-active waste and neutralize reactive sodium metal. The project would modify the FCF element chopper to handle larger assemblies, and add a high-throughput electrorefiner to handle the greater DU content of the blanket assemblies. Facility modification was planned for the period of 1995-1996. Treatment of approximately 22 MTHM of EBR-II blanket fuel would take place during the period 1997-1998. [ANL-W anticipated continued reprocessing of driver assemblies (3 MTHM) until completion, but the EBR-II Reactor and the Integral Fast Reactor Program were terminated in 1994.]	FR 56565 (09/00); and 4) ANL-W Spent Fuel Treatment Plan (F0000-0061-ES-00, 10/00). Item 1 allowed a demonstration project for the use of EMT for the treatment of 1.6 MTHM of EBR-II blanket and driver SNF. Items 2 & 3 analyzed and selected EMT for the treatment of all remaining Na-bonded fuels with the exception of Fermi-1 blanket, or about 26 MTHM of SNF (43% of the total analyzed). Treatment for <u>all</u> Na-Bonded SNF (60 MTHM), evaluated as Alternative 1, required an operational period of 13 years. Item 4 implements the program for the same period for just 43% of the SNF. This requires a reduced work force from that anticipated in Item 2.	3&4) require a reduced work force over the case analyzed in the project EIS (Item 2). This work force is, however, commensurate with the planning of the 1995 EIS.	
9	<b>C-4.1.8 Electrometallurgical Process Demonstration:</b> This project is designed to allow the demonstration and testing of a new SNF management process. The process is electrometallurgical treatment (EMT) for	<b>The decision on this project was deferred</b> for a future determination, i.e., this project was not selected in the ROD, and there is no plan to move forward on this project.	Since release of the ROD, there have been no operational differences.	Impacts are no different than previously analyzed

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	conditioning SNF for energy recovery or ultimate disposal in the geologic repository. The demonstration project would treat any and all fuel from all naval and DOE types in any condition (unstable or failed), and require only modest expansion of capabilities at existing facilities. The demonstration would proceed at the Hot Fuel Examination Facility and Fuel Cycle Facility at ANL-W. The modifications were scheduled for the period of 1994-1996, with operations during the period 1996-2024.			
II	<b><i>Balance of the Program in the 1995 EIS</i></b>			
1	<b>Consolidation of Non-AL SNF at the INEEL:</b> Planning for this activity requires consolidation of non aluminum-clad SNF at the INEEL in the amount of 1,940 shipments from across the DOE complex, certain government facilities, as well as domestic and foreign research reactors to the INEEL. This will result in the INEEL having managed approximately 426 MTHM of	<b>This project is to be implemented as a result of the ROD.</b> However, since release of the original ROD, planning has been impacted by the release of the Amended ROD (02/96). The number of shipments planned for the INEEL were reduced by 807 to 1,133 shipments. FSV transfers for long-term interim storage at the INEEL were entirely eliminated, RL transfers were almost entirely eliminated,	Less SNF handling activities are required.	Positive impacts are due to a greatly reduced number of shipments



Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	SNF during the period from 1995 to 2035.	and reductions were made to expected shipments from four other sources.		
2	<b>Transfer of aluminum-clad SNF located at the INEEL to SRS:</b> Planning for this activity requires making 114 shipments of aluminum-clad SNF from the INEEL to the Savannah River Site (SRS) during the period 1995-2035.	This project is to be implemented as a result of the ROD. However, since release of the original ROD, inclusion of this activity has also been incorporated into a LCPP.	Since release of the ROD, there have been no operational differences.	Impacts are no different than previously analyzed
3	<b>Continued interim storage of naval SNF at the INEEL:</b> Planning for this activity requires continuing the established program of naval SNF coming to the INEEL for examination at the ECF, with transfer and placement of the packaged SNF into interim storage at INTEC prior to shipment to the permanent geological repository. Analysis reviewed potential receipts of 728 transfers from the NRF to INTEC.	<b>This project is to be implemented as a result of the ROD.</b> Since release of the original ROD, planning has been impacted by the release of three other documents: 1) The Navy Container System EIS EIS-0251 (11/96); 2) ROD-1 62FR1095 (01/08/97); and 3) ROD-2 62FR23770 (05/01/97). Impacts are discussed elsewhere (see project I.2; C-4.1.1). This activity has been incorporated into a LCPP. These RODs determine the management system to be employed for naval SNF (dual-purpose canisters) and the location of this management (the ECF at the NRF). The ROD for the 1995 EIS anticipated 575 transfers from	Since release of the ROD, the location for interim storage of naval fuel has changed from INTEC to the NRF, thereby reducing the number of onsite round-trip shipments by 213 transfers from the original analysis, and by 60 transfers from the ROD.	Impacts are no different than previously analyzed

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
		the NRF to INTEC. Now, receipts of naval SNF into INTEC for storage will likely complete in FY02. INTEC will begin transferring naval SNF back to the ECF during FY03. Current plans anticipate no more than 515 total transfers during the relevant time period (NR:IBO-01/062; 04/05/01).		
4	<b>CPP-603 Basins Emptied of SNF:</b> Planning for this activity requires transfer of all SNF from wet storage at the CPP-603 basins to dry storage at CPP-603/IFSF and wet storage at CPP-666, as appropriate, by 12/31/00. The SNF movements for this activity were prescribed within a Court Order of 12/22/93, amending the Order of 06/28/93, Civil No. 91-0035-S-HLR, Civil No. 91-0054-S-HLR.	<b>This project is to be implemented.</b> Planning for this project was begun prior to the development of the scope of this EIS. Since release of the original Record of Decision (ROD), planning has been impacted by the release of three other documents: 1) the Idaho Settlement Agreement (10/95); 2) the LCPP for PBS ID-SNF-103 (11/99); and 3) the FY00 WP ID SNF-103 (09/99). The last SNF FHU was removed from the CPP-603 basins 04/28/00, eight months ahead of schedule. This activity is complete. Milestone completion was confirmed in a letter to the State (INTEC-SNF-00-022, 05/18/00).	Since release of the ROD, there have been no operational differences.	Impacts are no different than previously analyzed
5	<b>Consolidation of INEEL SNF storage at the INTEC:</b>	<b>This project is to be implemented.</b> Planning for	Since release of the ROD, there have been no	Impacts are no different than previously analyzed

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	Planning for this activity requires the INEEL to consolidate SNF storage from various locations at the INEEL to the INTEC as funding allows during the period 1995-2035.	this project was begun prior to the development of the scope of this EIS. Since release of the original Record of Decision (ROD), planning has been impacted by the release of four other documents: 1) the Idaho Settlement Agreement (10/95); 2) Amended ROD (02/96); 3) the LCPP for PBS ID-SNF-103 (11/99); and 4) the FY01 DWP (09/00). Consolidation is proceeding as planned. DOE-ID has been working toward the Idaho Settlement Agreement milestone for removal of all legacy SNF from the INEEL by 01/01/35. To meet this milestone, shipments to the geologic repository are currently planned to begin by 2015. Planners for the repository, however, are considering receiving shipments as early as 2010 (Draft Schedule, 12/21/99; see NSNF Program Support Web site: <a href="http://nsnfp.inel.gov/program/draftSS/">http://nsnfp.inel.gov/program/draftSS/</a> ).	operational differences.	
III		<b><i>Other parts of the program not analyzed in the 1995 EIS</i></b>		
	Not Applicable			

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
IV		<i>Planned major projects</i>		
	Not Applicable			

## 6.0 WASTE MANAGEMENT

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
I	<b>Projects Analyzed in the 1995 EIS</b>			
1	<b>C-2.8 Transuranic Storage Area Enclosure and Storage Project (Ongoing Project):</b> This project was previously evaluated (DOE 1992) and approved with a Finding of No Significant Impact (issued May 18, 1992). The Project consists of constructing and operating the Retrieval Enclosure, Waste Storage Facility (WSF) (which consists of multiple storage modules), support facilities (an operations control building) and associated upgrades to utilities (which consists of fire water, potable water, electrical power, communications, alarms, and sewage). This project summary describes two separate construction projects at the Radioactive Waste Management Complex (RWMC), (Transuranic Storage Area Retrieval Enclosure Project (TSA-RE) and the Storage Facility	This project is to be implemented as a result of the ROD. All elements analyzed in the planned NEPA were constructed, with the final element completed in 1997. The <i>INEL Transuranic Program Strategy Value Engineering Results</i> , dated 8/96, recommended retrieval operations could be delayed by several years. The DOE-ID <i>Evaluation of Feasibility Studies for Private Sector Treatment of Alpha and TRU Mixed Wastes</i> , dated 5/95, recommended retrieval by a private sector contractor as an option. DOE-ID awarded a contract to a privatized contractor (for a project called the Advanced Mixed Waste Treatment Project, AMWTP; see item # I.4 C-4.4.1 below), which includes retrieval operations. Retrieval is proposed to commence in 2002 for a 6-year duration. The analysis of their retrieval	The Retrieval Enclosure construction was completed in 1997 vs. 1996 and placed in a standby mode for retrieval operations to be performed by the AMWTP vs. the M&O Contractor. Less storage modules were built than analyzed. The Settlement Agreement requires all TRU and alpha contaminated low-level waste to be out of Idaho by 12/31/2018. This results in decreased risks for the M&O Contractor due to decreased storage modules, and retrieval operations transferred to the AMWTP, see C-4.4.1.	Positive impacts are due to: less facilities being built than analyzed and the TSA-RE facility not performing the analyzed operations

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	Project). Construction was proposed for 1993 -1996. The proposed retrieval operation, at an approximate rate of 5200 cubic meters per year, would have an approximate duration of 10 years. It was proposed the storage modules would be in service from 1994 - 2025.	method is contained in the AMWTP EIS (DOE/EIS-0290). All of the storage modules analyzed in the earlier NEPA action were not constructed, and there are no plans to construct any in the future. It is anticipated that some of the waste retrieved out of the TSA-RE facility by the AMWTP will not meet their WAC. This waste to be turned over to DOE-ID for further action.		
2	<b>C-2.9 Waste Characterization Facility (Ongoing Project):</b> This planned project would provide the design, construction, and operation of the Waste Characterization Facility (WCF) at the RWMC. This project would provide facilities to open containers of contact-handled transuranic waste, reclassified low-level waste, and mixed low-level waste; obtain and examine samples; and repackage the characterized waste in an environment designed to contain alpha-type radiation. Construction was proposed from 1995 - 1997 with	This project is to be implemented as a result of the ROD. The DOE-ID <i>Evaluation of Feasibility Studies for Private Sector Treatment of Alpha and TRU Mixed Wastes</i> , dated 5/95, included waste characterization to be performed by the AMWTP. Since a contract for the AMWTP was awarded by DOE-ID, see item # I.4 C-4.4.1 below, which includes characterization, the WCF was designed but not constructed. The visual examination portion of the characterization required for past and future shipments (until 3100 cubic meters project is complete) of TRU waste to	Through the completion of the 3100 cubic meter project scheduled for 12/31/2002, the visual examination portion of the characterization will be performed at ANL-W vs. RWMC. The waste is transported between RWMC and ANL-W for the visual examination portion of the characterization, and then transported back to RWMC for shipment preparation out of Idaho. The balance of the 65,000 cubic meters will be performed at the AMWTP, scheduled to commence in 2003. The AMWTP is located at RWMC.	Positive impacts are due to avoidance. The negative traffic and transportation impact is due to overland transportation of wastes to ANL-W and back to RWMC for characterization.

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	characterization operations proposed from 1998 - 2023.	the Waste Isolation Pilot Plant (WIPP) was/is being performed at the WIPP Waste Characterization Area located in the Hot Fuel Examination Facility at ANL-W. The waste is currently transported via an unpaved road in a flat bed truck w/out TRUPACTS for characterization, then back to the RWMC for loading to ship to WIPP. Initially, the waste was transported to ANL-W in TRUPACTS via U. S. Route 20.		
3	<b>C-2.10 Waste Handling Facility:</b> This project included construction of a 7,000 square feet Building for sorting, consolidating and repackaging municipal, hazardous, and radioactive waste. The project was planned to be located on the north side of the existing ANL-W site. Construction was proposed from 1996 - 1997 with operations proposed from 1997 - 2017.	The decision on this project was deferred in the ROD for a future determination. The project was never implemented and there are no plans for its implementation. The Contaminated Equipment Storage Facility, an existing facility at ANL-W, was modified to accommodate the radioactive waste sorting and repackaging functions originally planned for the Waste Handling Facility. This facility modification was categorically excluded from further NEPA review by DOE-CH in 1998.	The sorting, consolidating and repackaging of municipal, hazardous, and radioactive waste continues at ANL-W in various existing facilities. The functions are carried out in much the same manner as they were at the time of the ROD.	The positive impacts reflect impacts that didn't occur due to avoidance
4	<b>C-4.4.1 Private Sector Alpha-Contaminated Mixed Low-</b>	This project was planned in the ROD, however the decision on	This project will be located on the INEEL at RWMC vs. an off	The positive impacts are due to locating the facility inside

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	<p><b>Level Waste Treatment:</b> This project would provide for the processing of alpha-contaminated mixed low-level wastes, transuranic waste, and possibly small amounts of low-level waste and mixed low-level waste by the private sector. The expected throughput volumes would be approximately 2,000 cubic meters per year of alpha-contaminated low-level waste and 4,000 cubic meters per year of transuranic waste, for an approximate total throughput of 36,000 cubic meters. The most likely bulk volume treatment processes would include a combination of thermal treatments involving desorption and high-temperature oxidation/combustion of organic, followed by stabilization of ash and solid residues. In this EIS the basis was that this project would be located outside the INEEL. Construction was proposed 1997 - 2000, with a proposed operational period of 2000 - 2005.</p>	<p>this project was deferred for a future determination. A DOE-ID contract was issued to British Nuclear Fuels, Inc. to retrieve, sort, characterize and treat the 65,000 cubic meters of alpha-contaminated LLW, TRU wastes, and MLLW under a privatized project titled the AMWTP. This project will be located at the RWMC in the TSA. An EIS (DOE/EIS-0290), dated 1/99, was performed on this project with a ROD issued April 1999. The EIS analyzed an additional 120,000 cubic meters of TRU, alpha-contaminated LLW and MLLW for treatment from DOE onsite and offsite generators. Technologies analyzed in the various alternatives included: super compaction, macro encapsulation, incineration, micro encapsulation and vitrification. The incinerator analyzed in the EIS was placed on hold by the Secretary of Energy in March 2000 and directed the formation of a "Blue Ribbon Panel" to assess and recommend new technology alternatives to</p>	<p>site location, thereby eliminating the roundtrip shipments between the INEEL and the privatized facility. Retrieval operations will be performed by the AMWTP vs. the Management &amp; Operating contractor. Up to 185,000 cubic meters could be treated vs. the approximately 36,000 cubic meters initially analyzed. Under the current plan, alternative treatment methods will be utilized in-lieu of incineration.</p>	<p>the RWMC facility fence and the facility will no longer include an incinerator. The increased negative impacts are due to facility operations which relate to operations reassigned from the M&amp;O contractor in activity WM C-2.8.</p>



Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
		incineration; the report is due in Dec. 2000. Construction began in 2000, with retrieval operations proposed to commence in 2002, and treatment operations proposed to commence in 2003.		
5	<b>C-4.4.2 Radioactive Waste Management Complex Modifications to Support Private Sector Treatment of Alpha-Contaminated Mixed Low-Level Waste:</b> This project would provide modifications to the RWMC to support the transport of alpha-contaminated MLLW and TRU waste to a privately owned and operated waste treatment facility. If such a facility were chosen for implementation, additional waste retrieval, venting, transportation and examination facilities would be required to be operational by October 2000, to support both sending the waste offsite for treatment and receiving it back onsite after treatment. The proposed construction would be 1995 - 2000 and operations 2000 - 2005.	This project was planned in the ROD, however the decision on this project was deferred for a future determination. Since the ROD was issued the award of the Advanced Mixed Waste Treatment Project was made, which has the project located at the RWMC. As a result, these facilities are not required.	The modifications were not required as the privatized facility is located on the INEEL at RWMC, where the waste is currently stored.	These facility modifications were not required to be built due to the location of the AMWTP, see WM C-4.4.1
6	<b>C-4.4.3 Idaho Waste</b>	This project was planned in the	Was not implemented as	This facility was not required to

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	<b>Processing Facility:</b> This project, operated by the M&O, would treat and process both alpha-contaminated and transuranic-contaminated wastes to meet applicable requirements for land disposal. INEEL generated MLLW and LLW may also be treated. The design throughput would be 4,000 to 6,500 cubic meters per year. This proposed project is assumed to be outside of major facility areas. The proposed construction would be 2004 - 2008 and operations 2008 - TBD.	ROD, however the decision on this project was deferred for a future determination. Since the ROD was issued, the award of the AMWTP (see item I.4 C-4.4.1 above) was made, which negates the need for this project, as the same wastes would be treated at both facilities. Therefore, this project did not proceed.	planned. The Privatized option was selected for implementation. None of the impacts analyzed will occur.	be built due to the AMWTF.
7	<b>C-4.4.4 Shipping/Transfer Station:</b> This project would provide for the design, construction, and operation of a Shipping/Transfer Station. All alpha-contaminated LLW, LLW, and MLLW would be transported from this facility to treatment, storage, and disposal facilities. In addition, an expansion of the existing Stored Waste Examination Pilot Plant facility would be performed to identify alpha-contaminated LLW for transport. The proposed	This Project was not selected for implementation in the ROD.	This project is not proceeding, as it was not selected for implementation in the ROD. None of the impacts analyzed will occur.	This project was not selected for implementation in the ROD.

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	construction is 2002 - 2004, with operations 2004 - 2030.			
8	<b>C-4.5.1 Waste Experimental Reduction Facility Incineration:</b> This project will provide RCRA compliant treatment capability for DOE MLLW and to reduce the volume of LLW before disposal. The proposed construction is 1996 - 1997, with operations 1996 - 2015.	This project is to be implemented as a result of the ROD. This facility was restarted in 1995 and it treated onsite LLW and MLLW, and offsite MLLW. In Sept. 1999 the U. S. EPA promulgated revised standards for hazardous waste incinerators and other sources to reflect the performance of Maximum Achievable Control Technology (MACT) as specified in the Clean Air Act. In Sept 2000, DOE-ID announced that this facility would not be upgraded to meet MACT and would therefore be shutdown in FY 2001. In October 2000, the IDEQ denied the Part B permit application for the WERF incinerator and revoked interim status for the unit. As a result, the incinerator ceased operations in November 2000.	Incineration campaigns will not be performed at the INEEL with this facility as planned. The last campaign was performed in 2000. None of the analyzed impacts from incineration will occur.	Operations impacts are no different than previously analyzed. A recent decision to stop incineration will have a net positive effect
9	<b>C-4.5.3 Mixed Low-Level Waste Treatment Facility:</b> This project would be to provide the design, construction, and operation for a new facility to treat LLW and	This project was not selected for implementation in the ROD.	This project is not proceeding, as it was not selected for implementation in the ROD. None of the impacts analyzed will occur.	This project was not selected for implementation in the ROD.

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	MLLW. The facility would include several treatment processes including: incineration, thermal desorption, stabilization, decontamination, macro encapsulation, chemical precipitation, neutralization and amalgamation. The facility would be located outside of a major facility. The proposed construction would occur 2006 - 2008 with operation 2010 - 2035.			
10	<b>C-4.5.4 Mixed/Low-Level Waste Disposal Facility:</b> This project would provide design, construction, and operations of a new permanent radioactive waste disposal facility. The facility would be designed and permitted to accept LLW, treated MLLW, and alpha-contaminated LLW's. The facility would be located outside of a major facility. The proposed construction would occur 2002 - 2004, with operations 2004 - 2044.	This project was planned in the ROD, however the decision on this project was deferred for a future determination. Subsequently, the ROD for the DOE WM PEIS: Treatment and Disposal of Low-Level Waste and Mixed Low-Level Waste (DOE/EIS-0200-F), dated 2/00, did not identify the INEEL as a long-term disposal site for the INEEL or the DOE complex. The Nevada Test Site and Hanford were listed as DOE's long-term disposal sites. Therefore, this project will not proceed.	This planned disposal facility will not be implemented. None of the impacts analyzed will occur.	This project was not completed avoiding a number of negative impacts primarily to groundwater.
11	<b>C-4.6.4 Nonincinerable Mixed Waste Treatment:</b>	This project was selected to be implemented in the ROD.	A majority of the onsite impacts from this project will	The impacts are less because a majority of the treatment

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	This project would provide treatment of mixed wastes, which are not suitable for incineration, to meet LDR (Land Disposal Restriction) standards. The treatment processes would be located at the Waste Engineering Development Facility, located near the PBF. These U.S. EPA-approved treatment processes include ion exchange, stabilization, macro encapsulation, gamma-ray degradation treatment for polychlorinated biphenyl's, neutralization, and amalgamation. The proposed construction would occur 1994 – 1996, with operation 1996 - 2006.	Upon further review it was decided not to proceed with this project. However, MLLW treatment units for stabilization, macro encapsulation and sizing were constructed and permitted at WROC. The MLLW stabilization unit and the sizing unit were operated at the INEEL, but the macro encapsulation treatment process is not planned to be utilized at the INEEL. The INEEL intends to transition to other DOE or commercial facilities for treatment of MLLW with subsequent disposal at a permitted subtitle C disposal facility. While we plan to utilize offsite treatment facilities, DOE and commercial, on the lead, mercury and PCB waste streams; which were the lead decontamination, amalgamation, and gamma-ray degradation treatment technologies analyzed in the EIS.	not occur as several of the treatment processes are/will be performed at non-INEEL facilities.	processes will not be performed onsite
12	<b>C-4.6.6 Remote Mixed Waste Treatment Facility:</b> This project was to construct and operate a shielded, remotely operated facility to sort,	This project was planned in the ROD, however the decision on this project was deferred for a future determination. The scope of the project remains	The project has not been designed or constructed yet. The current proposal is to initiate construction in 2004, and operate the facility from	Impacts are no different than previously analyzed

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	characterize, treat, and repackage highly radioactive (Remote-Handled) waste stored at ANL-W. Construction was proposed for 1997 - 2000, with operations proposed for 2000 - 2020.	focused on making Remote-Handled radioactive waste stored at ANL-W ready for shipment and disposal. The project is now named the Remote Treatment Facility and is the subject of an Environmental Assessment currently in progress.	2007 to 2018.	
13	<b>C-4.6.7 Sodium Processing Project:</b> This project was to include the construction and operation of a facility to chemically convert radioactive metallic sodium waste to a dry sodium carbonate powder. The process would render the 180,000 gallons of waste sodium stored at ANL-W to be nonreactive and nonhazardous. Construction was proposed from 1995 - 1996 with operations proposed from 1997 - 1999.	This project was selected for implementation in the ROD. The project was constructed from 1996 to 1998 and began operation in December of 1998. The SPF is currently operating.	The waste product generated from the treatment of metallic sodium was changed from sodium carbonate powder to solid sodium hydroxide. The new waste product is also non-hazardous and is disposed of as low-level waste as described in the 1995 EIS. The total volume of low-level radioactive waste product produced was underestimated in the 1995 EIS. This difference (30 cubic meters per year vs. 220) is in volume only. The total radionuclide content of the waste product is the same as that analyzed in the 1995 EIS. The increase in the volume of low-level waste produced did not cause an expansion of the low-level waste disposal facility (the Radioactive Waste	Negative impact is due to slightly increased transportation

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
			Management Complex). The increased volume did not cause the construction of a new disposal facility, nor did it preclude the disposal of low-level waste by other DOE programs and facilities.	
14	<b>C-4.7.1 Greater-Than-Class-C Dedicated Storage:</b> This project would provide for the DOE receipt and storage of greater-than-Class-C low-level waste sealed radiation sources from the commercial sector. This facility would provide for the consolidated management and storage of the greater-than-Class-C low-level waste at one centralized storage location until a disposal facility is developed. The evaluation was based on a receipt scenario of 30,000 sealed sources over a 30-year period. The design basis includes a repackaging operation and storage in casks on a concrete pad. The proposed construction is 1996 - 1998, with operations 1998 - 2028.	A determination was made in the ROD that the INEEL will continue to plan and develop for this project. The current opinion/plan is that this project will not proceed here at the INEEL. On the contrary, there are actions being taken to keep this NRC-regulated commercial waste on the licensee's property.	This project will not be built so the transportation of 30,000 sealed sources for interim storage and the repackaging will not occur.	This project was not required
15	<b>C-4.8.1 Hazardous Waste Treatment, Storage, and Disposal Facilities:</b> This	This project, analyzed under Alternative D (Maximum Treatment, Storage, and	This project is not proceeding, as it was not selected for implementation in the ROD.	This project was not selected for implementation in the ROD.

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	proposed project would provide facilities to treat, store, and dispose of RCRA regulated hazardous wastes generated onsite. The facility would be outside of a major facility. Construction is proposed to occur 2005 - 2008, with operations 2008 - 2032.	Disposal) was not selected as the preferred alternative in the ROD. Therefore, this project was not listed in the ROD to proceed. We continue to have temporary storage for hazardous waste and it is shipped off-site for hazardous waste disposal.	None of the impacts analyzed will occur.	
16	<b>C-4.10.2 Plasma Hearth Project:</b> This project included the field scale testing of the Plasma Hearth equipment on actual mixed low-level radioactive waste. The project was planned to be demonstrated in the TREAT reactor high bay area at ANL-W. Construction is proposed to occur 1995 – 1996, with operations 1996 – 2000.	The decision on this project was deferred in the ROD for a future determination. The project did not progress beyond the nonradioactive bench-scale demonstration phase. The nonradioactive bench-scale phase was categorically excluded from further NEPA review by DOE-CH in November of 1995. The project was terminated in 1998. The equipment has been dismantled.	The project created less air emissions and effluents than originally planned since no actual radioactive waste was used in the demonstration.	Use of nonradioactive surrogates reduced the potential impact.
II	Balance of the Program in the 1995 EIS			
1	<b>Transuranic Waste:</b> Approximately 65,000 cubic meters of CH-TRU, alpha contaminated MLLW/LLW (managed as TRU), and RH-TRU, is in retrievable storage at the RWMC. Although there	The WIPP is open for the disposal of CH-TRU. The INEEL started shipments in 1999. The path forward for the waste managed as TRU consists of the following four components:	The strategy for disposing of the CH-TRU was finalized with the opening of WIPP. In addition, the strategy for treating the alpha-contaminated waste to RCRA LDR standards, TSCA	Impacts are no different than previously analyzed



Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	<p>is still no facility for disposal of CH-TRU, approximately 39,000 cubic meters, is managed assuming that it will be retrieved from storage, repackaged, certified to meet disposition facility requirements, and transported to WIPP for final disposition. The plan is to initiate disposition operations in 1998. A strategy for disposing the approximately 26,000 cubic meters of alpha contaminated MLLW/LLW has yet to be established. In addition, the strategy for disposing of a small quantity of RH-TRU needs to be developed.</p>	<p>1) 3100 cubic meters - The 3100 cubic meters is working to certify and ship 3100 cubic meters of CH-TRU out of Idaho by 12/31/02, per the Settlement Agreement. To accomplish this, additional examination, gas generation test, TRUPACT II loading capability and multi-shift operations is planned. Low activity waste that is managed as TRU may be combined in Standard Waste Boxes with high activity waste that is managed as TRU such that the Standard Waste Box can be certified as TRU waste. These Standard Waste Boxes will then be transported in TRUPACT-IIs and disposed of at WIPP.</p> <p>2) AMWTP - The AMWTP will retrieve, sort, characterize and treat the remaining CH-TRU, which meets their WAC, and ship out of Idaho by 12/31/2018, per the Settlement Agreement. Similar operations will be performed on the alpha-contaminated MLLW/LLW that is managed as TRU, in order to certify the final waste form as TRU waste. The final waste</p>	<p>requirements and to meet WIPP's Waste Acceptance Criteria was finalized. The final strategy for the RH-TRU and the AMWTP WAC noncompliant CH-TRU needs to be developed in preparation for disposal at WIPP. Disposition operations commenced in 1999 vs. 1998 as planned. The analysis on the stored RH-TRU is adequate. No other RH-TRU analysis was performed, but it will be required in the future prior to finalizing the strategy. . The Settlement Agreement changed the planned TRU strategy by initiating shipments earlier as well as shorter shipment duration. The changes: requiring 3100 cubic meters of TRU out of Idaho by 12/2003, while the pre-settlement plan had all wastes going through the treatment facility (AMWTP C-4.4.1 or IWPF C-4.4.3); and the duration of shipments will be completed approximately seven years earlier than that planned in the 1995 EIS.</p>	

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
		<p>form can then be shipped to WIPP for disposal. The AMWTP, see C-4.4.1, has an EIS (DOE/EIS-0290) which covers all operations.</p> <p>3) RH-TRU &amp; AMWTP WAC-noncompliant CH-TRU waste. The current plan is to develop capabilities to retrieve (RH-TRU only), treat, characterize, certify and dispose of the RH-TRU and AMWTP WAC-noncompliant stored wastes. The planned disposition is at WIPP with completion by 12/31/2018.4) An additional source of TRU may result from the alternative action selected in the ROD from the ongoing Idaho High-Level Waste &amp; Facilities Disposition EIS DOE/ID-0287D. Any resulting TRU will be analyzed in that EIS.</p>		
2	<p><b>Low-Level Waste:</b> A majority, approximately 60%, of the LLW is treated prior to disposal. Solid waste treatment consists of incineration (either onsite at WERF or at an offsite commercial facility),</p>	<p>Contact-handled (CH) and remote-handled (RH) low level waste (LLW) is generated at the INEEL. Approximately 67% of the solid CH LLW generated at the INEEL is direct disposed in the Pits 17-20 within the Subsurface Disposal Area</p>	<p>Since release of the ROD the LLW operations have remained the same with the following exceptions: incineration is no longer performed; on-site disposal is planned through 2020 vs. 2006 for CH and 2009 for RH;</p>	<p>Positive impacts from stopping incineration, negative impacts from less robust waste forms and longer onsite disposal</p>

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	<p>compaction or size reduction (at WERF). Most liquid waste is concentrated at INTEC. The condensed vapor for the evaporator is processed by the Liquid Effluent Treatment and Disposal Facility (then pumped to the tank farm) and the gaseous effluent vented out the high-efficiency particulate air filtered stack. Some small volumes of liquids are also solidified at WERF and disposed at RWMC. All of ANL-W's low-level liquid waste is processed at the Radioactive Liquid Waste Treatment Facility with the volume-reduced sludge transported to RWMC. Small volumes are discharged to the double-lined pond at the TRA. Potential LLW from storm runoff at TAN is handled through an ion exchange system. The solid LLW is disposed of through shallow land burial at the RWMC in pits and concrete-lined soil disposal vaults in the SDA. As of 1991, the available disposal capacity was 37,000 cubic meters with an additional</p>	<p>(SDA) of the Radioactive Waste Management Complex (RWMC). The RH LLW is disposed in vertical concrete vaults located within the same pits. Approximately 33% of the solid CH LLW generated at the INEEL is volume-reduced (through compaction and sizing) at the Waste Reduction Operations Complex (WROC). Very limited liquid LLW stabilization and/or treatment capabilities exist at the INEEL, with the exception of some capabilities at ANL-W for liquid LLW generated in their facilities. Incineration is no longer a form of treatment, it last occurred in 2/98.</p> <p>Current planning indicates continued CH and RH disposal of solid LLW at the RWMC through 2020. Approximately 50,000 cubic meters of disposal space remain in Pits 17-20. No additional space is available. It is proposed that three additional sets of concrete vaults will be constructed to satisfy RH LLW projected receipts through 2020. To</p>	<p>and we plan to commence commercial treatment in 2004.</p>	

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	67,000 cubic meters of expansion capacity was potentially available.	<p>implement the WM Programmatic ROD, shipment of solid CH LLW to NTS and Hanford in limited quantities will begin in late 2001. These shipments will be LLW that does not satisfy the waste acceptance criteria of the RWMC. LLW volume reduction capabilities at WROC will be phased out beginning in 2001. Private sector contracts for solid and liquid LLW volume reduction and stabilization, as appropriate, will be implemented in late 2001.</p> <p>An additional source of LLW may result from the alternative action selected in the ROD from the ongoing Idaho High-Level Waste &amp; Facilities Disposition EIS (DOE-ID-0287D). Any resulting LLW will be analyzed in that EIS.</p>		
3	<b>Mixed Low-Level Waste:</b> The beta-gamma MLLW is being stored while various treatability studies are being performed. Eleven hundred cubic meters of MLLW is currently stored onsite in permitted storage	Onsite and offsite MLLW was treated at the WERF incinerator from 1995 - 2000. DOE-ID notified the EPA that the incinerator at WERF will not be upgraded to meet the MACT rule and will therefore be	The objective to treat MLLW prior to disposal has not changed. A method of treatment did change with the closure of the WERF incinerator so alternative on-site treatments will be	Positive impacts from stopping incineration, negative impacts from transportation for offsite treatment.

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	<p>facilities, with a capacity of 1,800 cubic meters. The storage facilities are: Mixed Waste Storage Facility; portable storage units at the Power Burst Facility area; Hazardous Chemical/Radioactive Waste Facility at INTEC; the Radioactive Sodium Storage Facility, Building 703 and the Radioactive Scrap and Waste Facility at ANL-W. A small amount of waste is being treated through ongoing treatability studies onsite and offsite. Existing treatment facilities include WERF incinerator and stabilization and the WEDF stabilization system, all on standby. Additional treatment facilities include a portable waste treatment unit, debris treatment, and high-efficiency particulate air filter leach system at INTEC. Treatment is required prior to disposal due to the RCRA hazardous wastes components. The RWMC is the designated site for treated waste, which meets the waste acceptance criteria.</p>	<p>shutdown. The onsite/offsite waste scheduled for incineration will be reclassified for alternative treatment at WROC (sorting/sizing/segregation, and stabilization) and commercial facilities prior to disposal at commercial facilities. The treatment facilities at INTEC and ANL-W remain in operation, including: debris treatment, and high-efficiency particulate air filter leach system. Other DOE and commercial treatment and disposal facilities will be utilized on MLLW which cannot be treated at the INEEL, including lead, mercury, and polychlorinated biphenyls. It should be noted that the permitted storage capacity is far greater than 1800 m3. Storage of the MLLW at CPP-1617 (INTEC), WERF Waste Storage Building (WWSB), Mixed Waste Storage Facility (MWSF/Portable Storage Unit) is planned until treatment and disposal can be conducted. The assumption is that the backlog of MLLW in storage</p>	<p>performed and other DOE and commercial facilities will be used. Additional storage facilities that were analyzed were included at CPP-1617, TAN 647, WWSB, and MWSF. The 1995 EIS included a 10-year plan for MLLW, while the current programmatic plan is through FY2049.</p>	

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	Waste which cannot meet the acceptance criteria will be stored until a suitable facility is available. DOE requires all DOE generated waste, treated to meet LDR, must be disposed at DOE facilities. Commercial disposal may be used on a case-by-case basis.	prior to 2006 will have been significantly reduced/eliminated and the ongoing MLLW activities will revolve around the treatment, storage and disposal of newly generated MLLW. Therefore, the current technical approach will be focused on developing and maintaining appropriate contracts with commercial/off-site facilities, covering disposal and treatment as required to meet the waste acceptance criteria and for cost effectiveness.		
4	<b>Greater-Than-Class-C Low-Level Waste:</b> Greater-than-Class-C low-level waste is being stored until it can be disposed of in a deep geologic repository, unless the NRC approves disposal elsewhere. The RWMC stores approximately 25 cubic meters of greater-than-Class-C-waste.	The 25 m3 of GTCC waste identified in the 95 EIS was removed from the GTCC category based on an INEEL contractor legal department opinion that the waste was improperly categorized as commercial waste due to the circumstances surrounding INEEL's assignment for management of the two waste streams. Consequently, the current inventory of GTCC at INEEL is 0. A new activity in the planning stage involves DOE/HQ's EM-22 and the U.S. Air Force. They are currently preparing an	No change from what was analyzed.	Impacts are no different than previously analyzed

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
		Environmental Assessment to select a DOE storage site for 10 Radioisotopic Thermoelectric Generators, which contain large Strontium-90 sources. The EA also calls for the site to be able to accept an additional 40 RTG's in the future. RTG's are their own Type B shipping containers and can be stored outdoors. The INEEL is one of nine sites being evaluated. The EA is titled "Joint U.S. Department of Energy (DOE) and U.S. Air Force (USAF) Environmental Assessment (EA) for the Removal, Transportation and Storage of Radioisotope Thermoelectric Generators (RTG's)" and the number is DOE/EA-1351.		
5	<b>Special-Case-Waste:</b> The special-case-waste, 200 cubic meters, is being stored at various INEEL major facility areas until characterization, treatment or disposal options are identified and implemented. A reclassification, following characterization, into a major	DOE Order 435.1, which is the current Waste Management Order which was issued in 1999, does not use the terminology Special-Case-Waste; it is now termed "Waste with No Identified Path to Disposal" (NPD). Considerable characterization efforts since 1995 has led to reclassification	No change.	Impacts are no different than previously analyzed

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	waste type is planned for some of these wastes. Actions associated with this special-case waste are evaluated on a case-by-case basis, and therefore the EIS does not specifically assess impacts related to such actions.	of significant quantities of previous classified SCW to other waste streams (e.g. TRU waste). Using the 1995 criteria, today's inventory would be approximately 6 cubic meters. There is no change in how the NPD is managed and the end objective to get it into a major waste type, if possible. A process is in place to work with the generators prior to their operation to minimize the generation of NPD.		
6	<b>Hazardous Waste:</b> Hazardous waste generated at the INEEL is recycled, reused or reprocessed, where possible. The hazardous waste is held at designated accumulation points for less than 90 days than transported to the Hazardous Waste Storage Facility, a RCRA Part B-permitted facility located at the Central Facilities Area. From this facility the waste is prepared for shipment to an offsite treatment and disposal facility. Highly reactive or unstable materials are addressed on a case-by-case basis and is either stored,	The recycled, reused or reprocessed of hazardous waste continues. INEEL will continue to utilize commercial permitted facilities for the treatment and disposal of hazardous waste. The primary storage facility (operated under interim status) for accumulated hazardous waste is at CPP-1619 Hazardous Waste Storage Facility at INTEC until shipment to the commercial facility is performed. Additional permitted storage facilities are: WERF Waste Storage Building (WWSB), the Mixed Waste Storage Facility (MWSF) and the Mixed Waste Storage	The reactive HW is sent off-site to permitted facilities.	Impacts are no different than previously analyzed



Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	burned or detonated at the Reactive Storage and Treatment Area (RSTA) near the Auxiliary Reactor Area.	Facility Portable Storage Units (MWSF-PSU), and Special Manufacturing Complex Hazardous Waste Storage Area. It is planned that these additional facilities will be shut down as follows: MWSF and the MWSF-PSU end of FY 2004 (RCRA closure initiated in FY 2005) and the WERF Waste Storage Building (WWSB) end of FY 2005 (RCRA closure initiated in FY 2006). The RSTA was closed under a RCRA closure plan. Now our reactives are sent to permitted facilities offsite.		
7	<b>Industrial Waste:</b> The site generated industrial waste is disposed of at the Central Facilities Landfill and the in town facilities disposal at the Bonneville County Landfill. An active recycling program has been started to reduce the amount of INEEL industrial waste. It is planned the recycling program will be expanded to include asphalt and metals and to convert scrap wood into mulch. The goal is to reduce the amount of industrial commercial waste	The Industrial waste operations are consistent with what was discussed in the EIS. The INEEL did operate a Cuber which reused some industrial waste to produce cubes to supplement the coal in the INTEC coal fired power plant. The Cuber is no longer in operation.	No change in operations.	Impacts are no different than previously analyzed

Item No.	1995 EIS Section Number and Scope of Program	Scope of Program As It Exists Today	Major Differences in Operations (1995 vs. Current)	Environmental Impact of Operational Changes
	through an intensive program of waste avoidance, recycling, and segregation.			
III		<i>Other parts of the program not analyzed in the 1995 EIS</i>		
	All portions of the WM program were addressed in the 1995 EIS.			
IV		Proposed Major Projects		
	None.			

**Table 6-1.1 Waste Disposal Volumes**

	Volumes of Disposed INEEL Wastes (m <sup>3</sup> )							Average Yearly Disposal Rate	1995 EIS Projected Yearly Disposal Rates
Waste type (disposal location)	CY-95	CY-96	CY-97	CY-98	CY-99	CY-00	Total		
LLW/Treated MLLW (RWMC SDA)	1159	726	1564	4218	4210	4622	16499	2750	3942 <sup>a,b</sup>
MLLW (Offsite)	3	20	21	37	50	1080	1211	202	0 <sup>b</sup>
Hazardous (Offsite)	33	934	254	146	896	828	3091	515	1201
Industrial (CFA LandFill)	56782	45175	53971	41053	50812	41410	289203	48201	58,298
TRU (WIPP)	0	0	0	0	26	122	148	25	2500 <sup>c</sup>
MTRU (WIPP)	0	0	0	0	0	55	55	9	0 <sup>d</sup>

a These numbers are after treatment disposal volumes

- b The 1995 EIS projected all MLLW to be disposed at the INEEL. Because the MLLW Disposal Facility was not built, listed MLLW cannot be disposed at the INEEL. With the shutdown of the WERF incinerator, the INEEL has limited MLLW treatment capability.
- c The 1995 EIS projected TRU shipments of untreated wastes from 1998 - 2002 at this rate. Treated waste volumes would begin shipment after 2005.
- d At the time of the 1995 EIS, it was anticipated that all mixed TRU waste would receive treatment prior to shipment.

LLW CY95, CY96 compiled from RWMIS database.

LLW CY97 compiled from IWTS/RWMIS databases.

LLW CY98, CY99, CY00 compiled from IWTS database.

MLLW all CYs compiled from IWTS database.

HAZ all CYs compiled from IWTS database.

INDUST all CYs compiled from INWMIS database.

TRU/MTRU all CYs compiled from TRIPS database.

EIS Projections from EDF-94-Waste-0104, "Waste Generation, Storage, and Treatment Volumes", March 1995 (AR-RF-1173)

IWTS = Integrated Waste Tracking System

RWMIS = Radioactive Waste Management System

TRIPS = Transuranic Reporting, Inventory, and Processing System

INWMIS = INEEL Nonradiological Waste Management Information System

